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Leonard S. Sawicki
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March 28, 1996

EX PARTE

Mr. William F. Caton
Secretary
Federal Communications Commission
Room 222
1919 M Street NW
Washington, D.C. 20554

Re: CC Docket 96-45: Joint Board

Dear Mr. Caton:

Yesterday, Daniel Kelley of Hatfield Associates and Amy Zirkle, Chris Frentrup and I, all of MCI, met with Deborah Dupont and Rafi Mohammed of the Common Carrier Bureau. The purpose of the meeting was to review preliminary results of a Hatfield Associates study on the cost of unbundled network elements. MCI also recounted its positions on universal service. The attached information was used during the meeting and describes the topics covered.

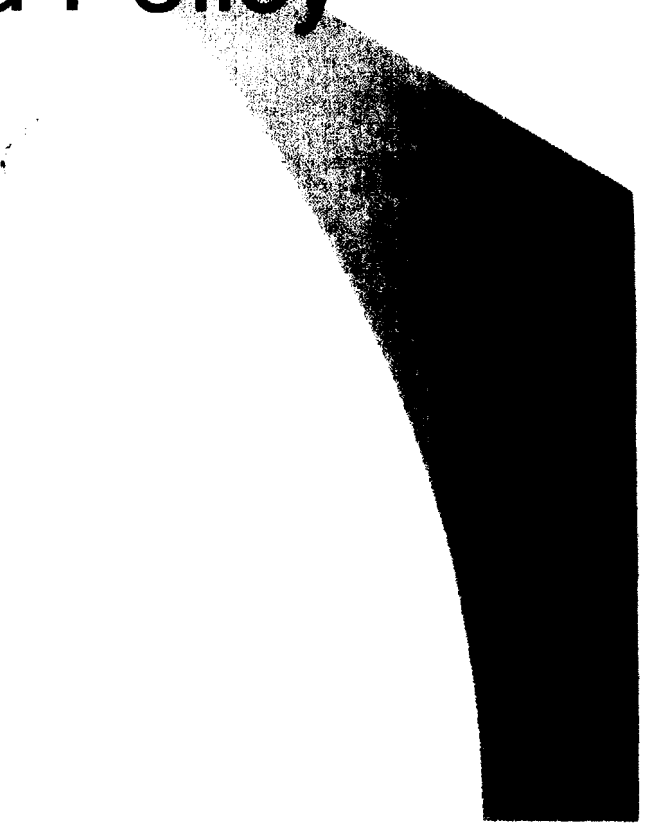
Sincerely,

Leonard S. Sawicki

Attachment

cc: Ms. Dupont
Mr. Mohammed

The Cost of Basic Network Elements: Theory, Modeling, and Policy Implications



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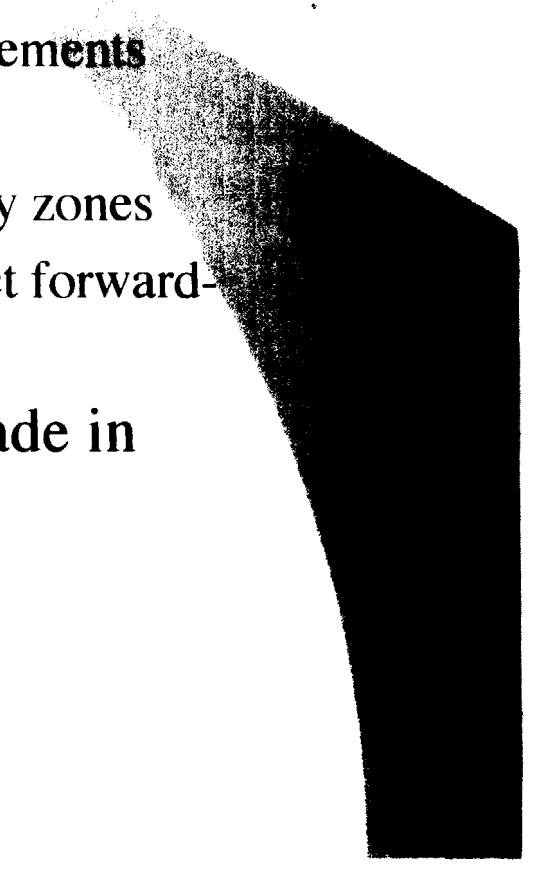
Methodology

- Model estimates TSLRIC of unbundled network functions
- Based on 1994 Hatfield approach to costing of basic universal service
  - extends analysis to all major unbundled network elements
  - "greenfield" approach
  - estimates costs separately for six population density zones
  - standard Bellcore engineering practices to construct forward-looking network
- Adjusted to incorporate some assumptions made in Benchmark Cost Model



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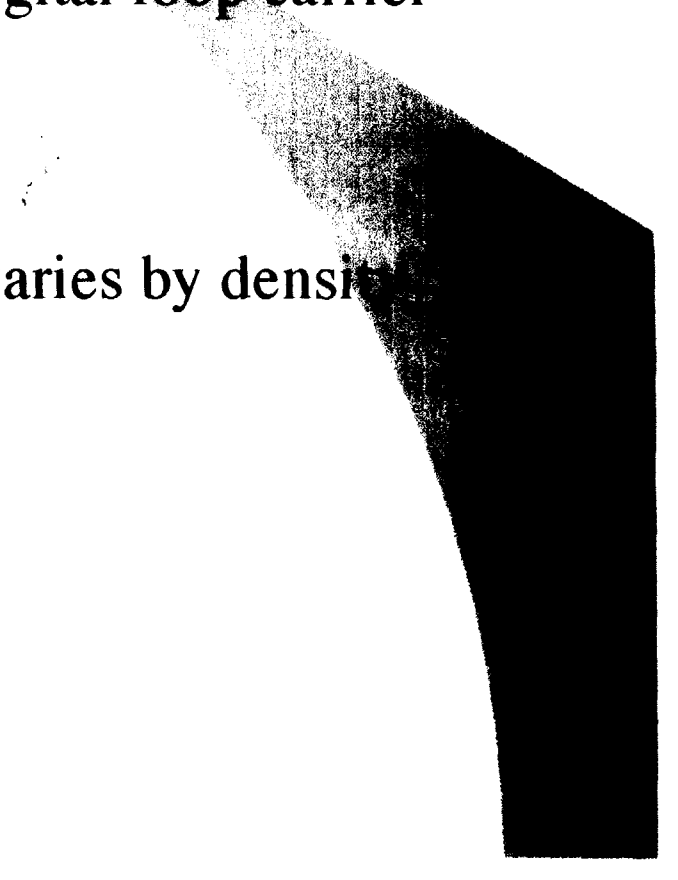
Methodology - Assumptions

- Loop
  - Feeder is 75% analog copper, 25% digital loop carrier
  - Distribution 100% copper
- End Office Switching
  - 100% digital switching, switch size varies by density range
- Transport
  - 100% fiber
  - all traffic is tandem-routed



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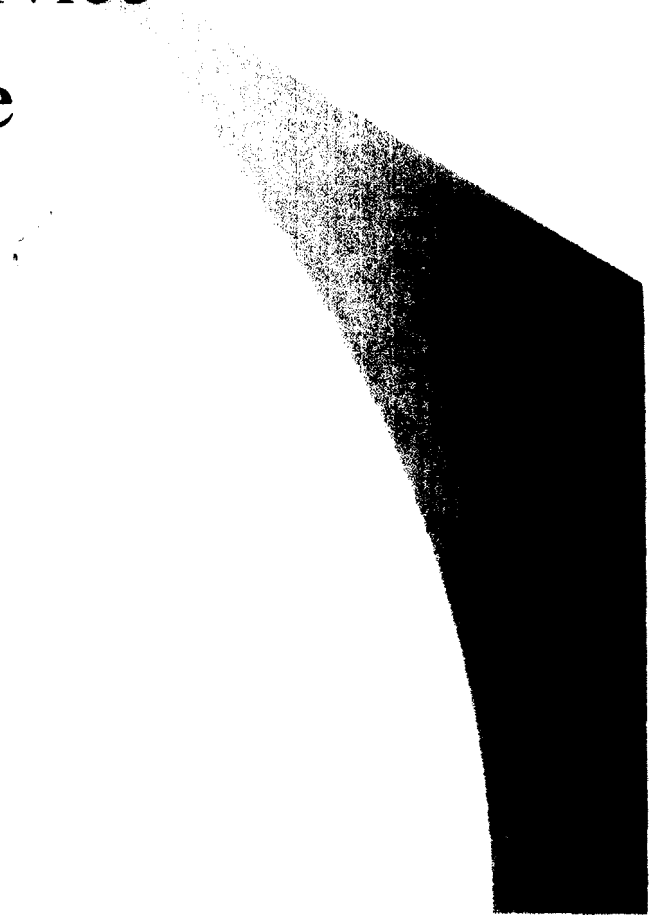
Plant sized for Full Range of LEC Services

- Bus & Res Local Exchange Service
- IntraLATA Toll & Private Line
- Switched & Special Access
- Operator Services
- Public Telephone Services



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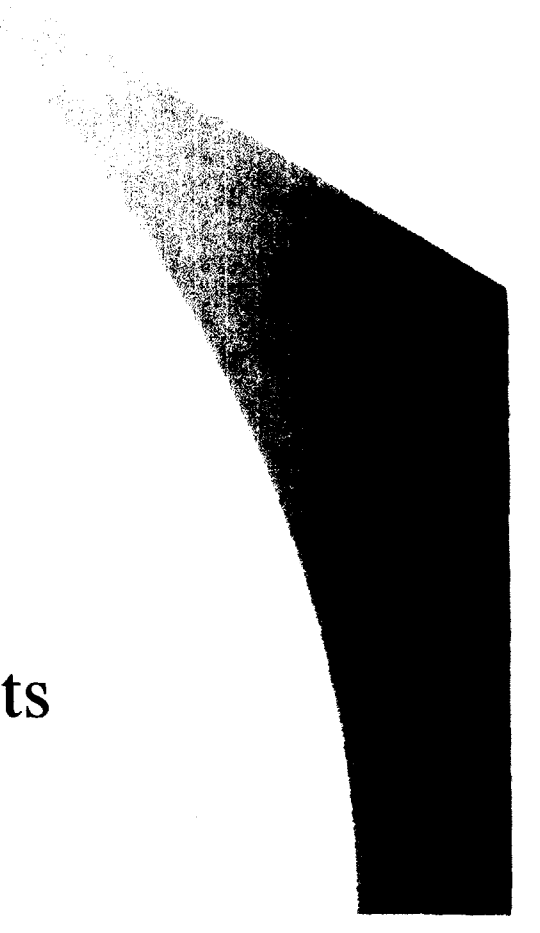
Methodology - Data Sources

- 1994 Statistics of Common Carriers
  - Switched Traffic for all services
  - Switched and Special Access Lines
- 1990 Census Data
  - Population Density by Census Tract
  - Census Tract Land Area
- Benchmark Cost Model
  - loop plant placement & materials costs



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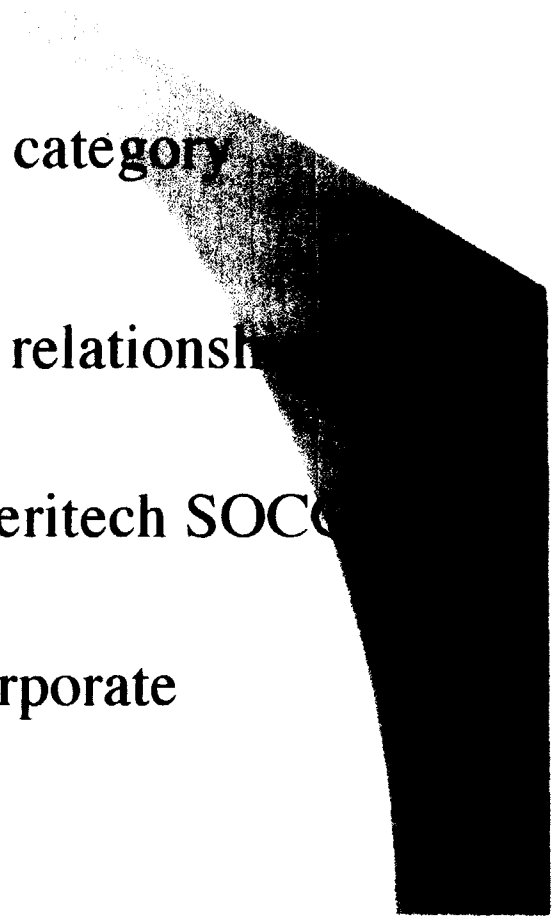
Methodology - Expenses

- Levelized Capital Costs
  - 10% overall return
  - 40% state + federal tax rate
  - FCC-approved depreciation lives by plant category
- Operating Expenses
  - plant-specific operating expense based on relationsh between SOCC expenses and investment
  - network operations expense based on Ameritech SOC per-line expense
  - 6% factor applied to represent variable corporate operations expense



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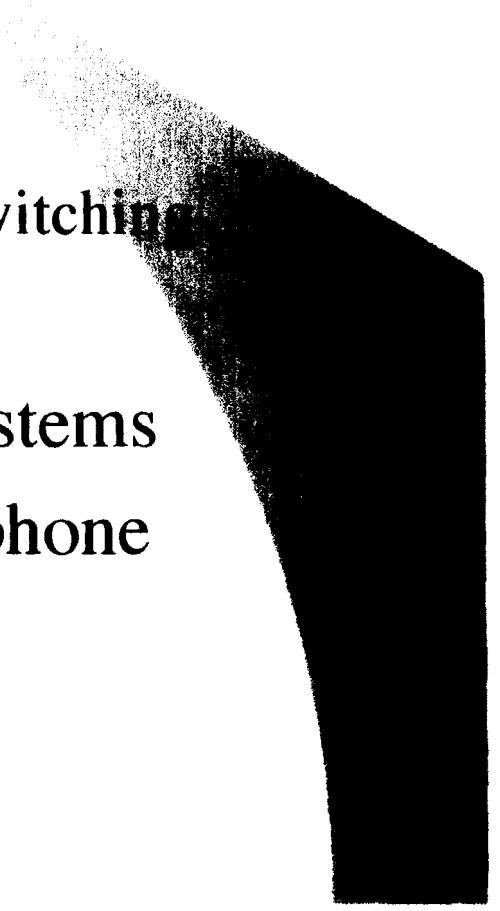
Network Elements

- Loop
  - Distribution
  - Concentration
  - Feeder
- Switching
  - Port
  - Switch Usage
- Transport
  - Dedicated
  - Common
  - Tandem Switching
- Signaling
- Operator Systems
- Public Telephone Equipment



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Results - Unbundled Loops

	0-10 pop/km2	10-100 pop/km2	100-500 pop/km2	500-1,000 pop/km2	1,000-5,000 pop/km2	>5,000 pop/km2	Totals
Loop Distribution							
Annual Cost	$ 2,423,179,454	$ 6,150,810,401	$ 1,643,963,604	$ 1,275,061,157	$ 3,690,920,048	$ 770,922,988	$ 15,954,857,652
Units	8,969,439	30,420,078	27,516,643	19,807,291	56,445,945	13,066,968	156,226,363
Unit Cost	$ 22.51	$ 16.85	$ 4.98	$ 5.36	$ 5.45	$ 4.92	$ 8.51
Loop Concentration							
Annual Cost	$ 1,407,376,597	$ 4,356,341,762	$ 46,557,808	$ 34,169,753	$ 97,158,618	$ 24,034,105	$ 5,965,638,642
Units	8,969,439	30,420,078	27,516,643	19,807,291	56,445,945	13,066,968	156,226,363
Unit Cost	$ 13.08	$ 11.93	$ 0.14	$ 0.14	$ 0.14	$ 0.15	$ 3.18
Loop Feeder							
Annual Cost	$ 570,854,034	$ 1,498,576,213	$ 1,245,621,890	$ 264,379,205	$ 414,853,516	$ 35,456,856	$ 4,029,741,714
Units	8,969,439	30,420,078	27,516,643	19,807,291	56,445,945	13,066,968	156,226,363
Unit Cost	$ 5.30	$ 4.11	$ 3.77	$ 1.11	$ 0.61	$ 0.23	$ 2.15
Total Loop							
Annual Cost	$ 4,401,410,085	$ 12,005,728,376	$ 2,936,143,301	$ 1,573,610,115	$ 4,202,932,183	$ 830,413,948	$ 25,950,238,009
Units	8,969,439	30,420,078	27,516,643	19,807,291	56,445,945	13,066,968	156,226,363
Unit Cost	$ 40.89	$ 32.89	$ 8.89	$ 6.62	$ 6.20	$ 5.30	$ 13.84

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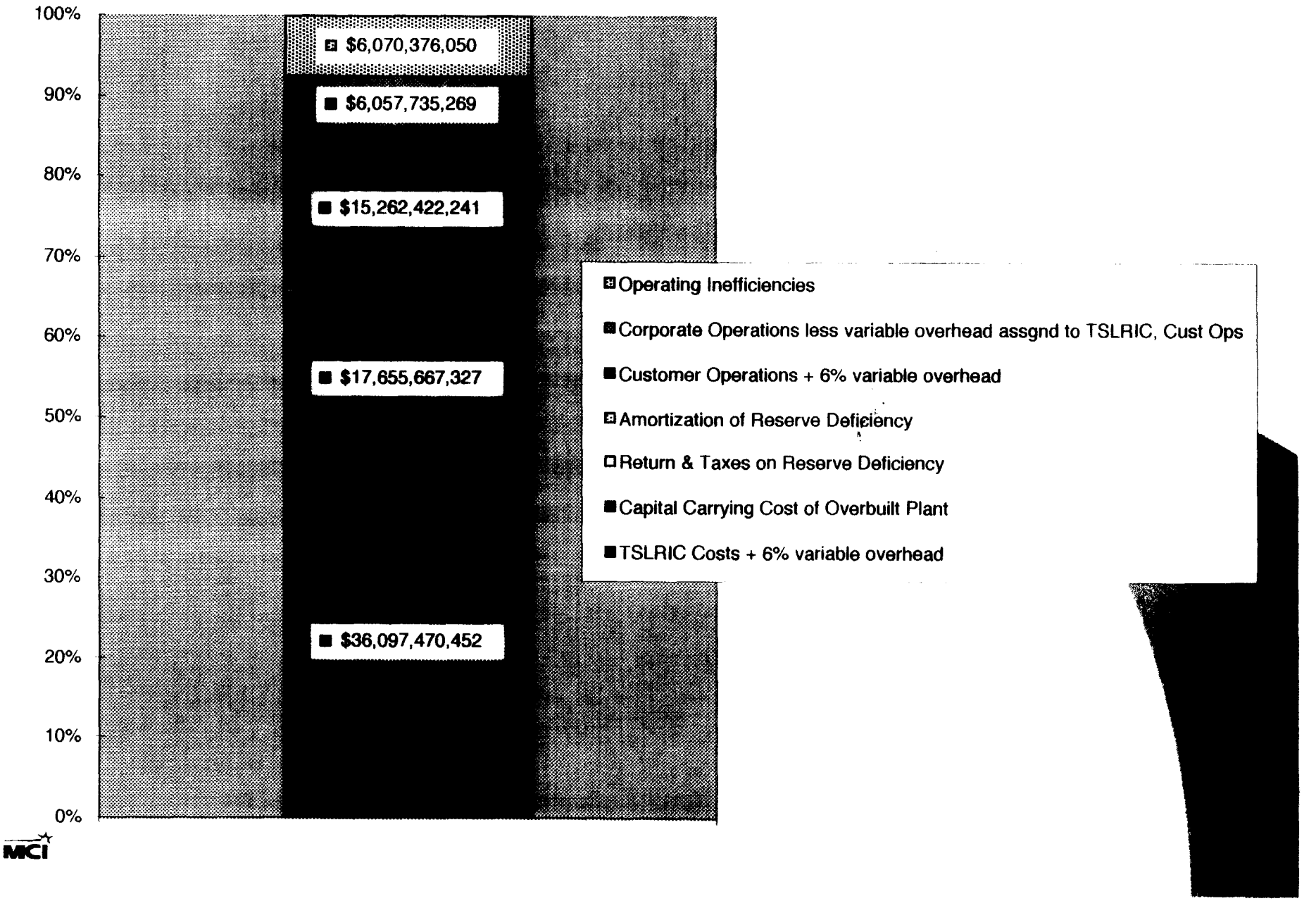
Results - Other Network Functions

	Annual Cost	Units		Unit Cost	
End office switching	$ 5,751,872,548				
1. Port	$ 1,725,561,764	141,126,511	switched lines	$ 1.02	per line/month
2. Usage	$ 4,026,310,783	2,264,200,000,000	minutes	$ 0.0018	per minute
Signaling network elements	$ 253,657,788	n/a			
Transport network elements					
1. Dedicated	$ 1,150,882,311	18,227,755	trunks	$ 5.26	per DS-0 equivalent/month
				$ 126.28	per DS-1 equivalent/month
				$ 3,535.78	per DS-3 equivalent/month
2. Common	$ 664,454,045	1,464,070,959,357	minutes	$ 0.0002	per minute per leg (orig or term)
3. Tandem switch	$ 1,112,005,760	1,464,070,959,357	minutes	$ 0.0008	per minute
Operator systems	$ 116,117,445	n/a			
Public Telephones	$ 1,098,242,547	n/a			

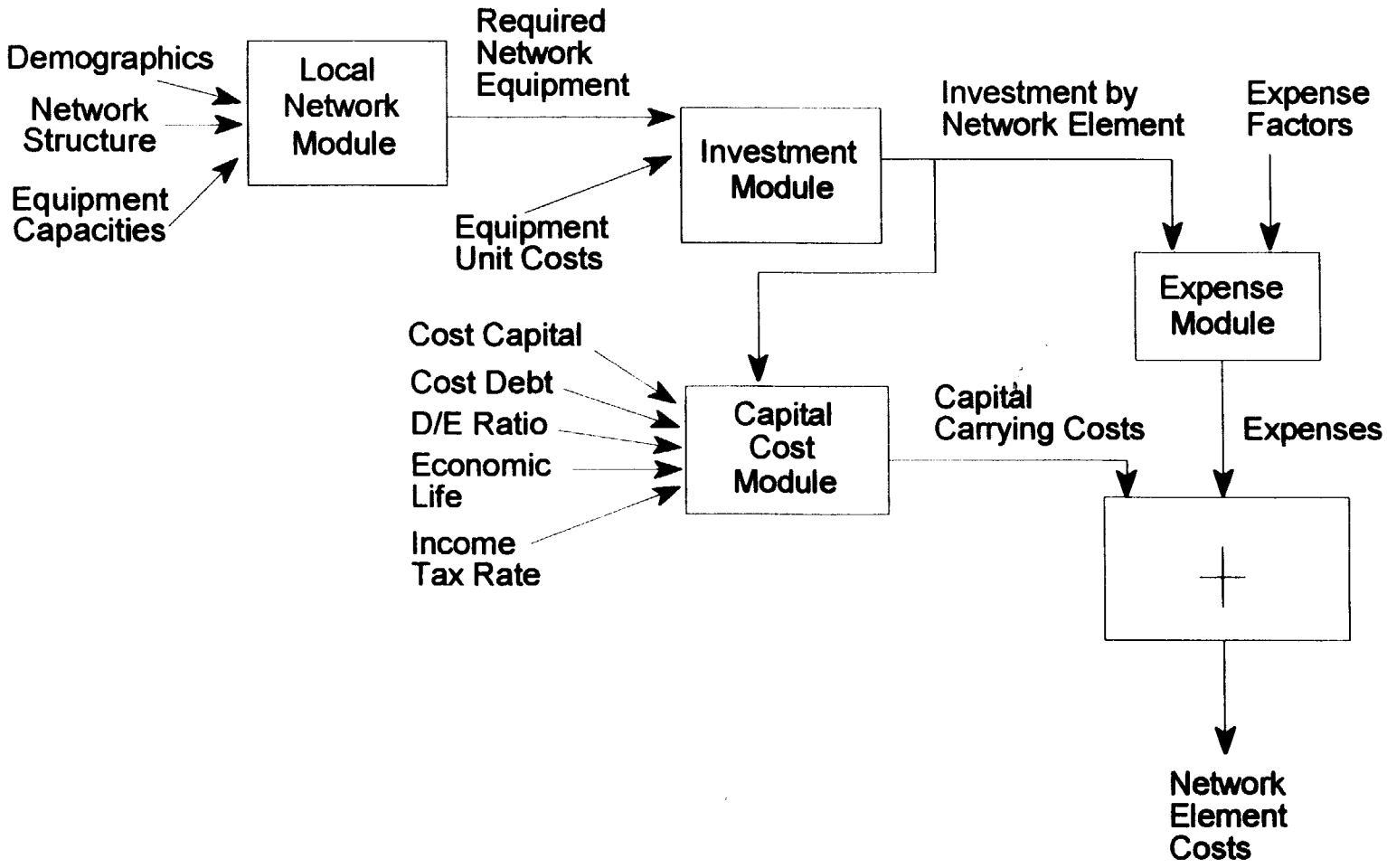
Components of the Revenue Requirement



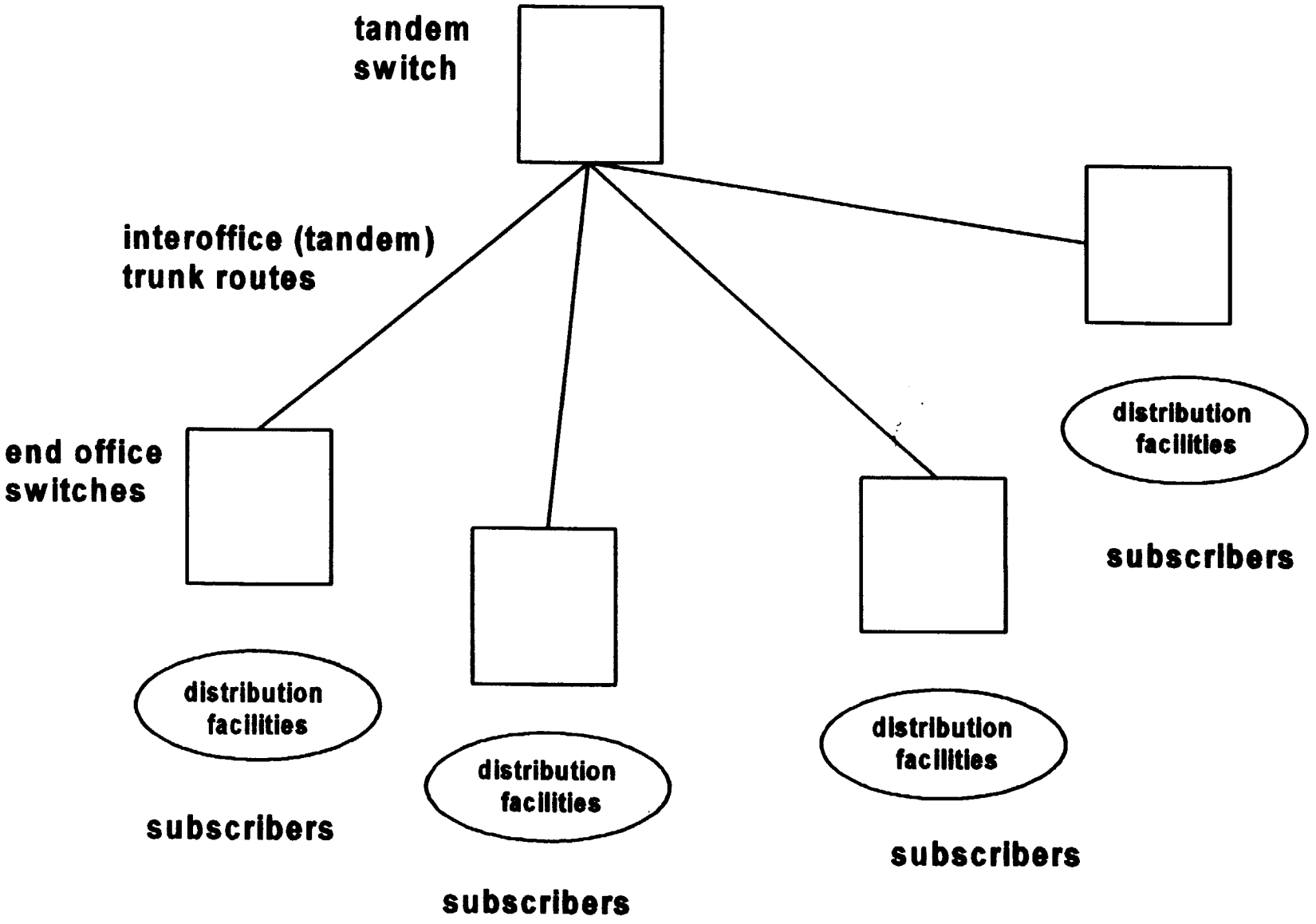
Components of the Revenue Requirement

Total Revenues - Tier One Companies '93			$	81,997,412,000		
Total TSLRIC Wholesale Cost			$	36,097,470,452		
The "Gap"			$	45,899,941,548	$	45,899,941,548
Model Investment	$	131,320,817,108				
Actual Investment	$	256,803,243,000				
Overbuilt Plant	$	125,482,425,892				
Capital Carrying Cost of Overbuilt Plant			$	17,655,667,327	$	28,244,274,221
Depreciation Reserve Deficiency	$	3,314,926,000				
Return & Taxes on Reserve Deficiency			$	438,306,882	$	27,805,967,339
Amortization of Reserve Deficiency			$	414,365,750	$	27,391,601,589
Customer Ops ('93 Actual)	$	13,184,107,220				
Plus: CapCost of GSF	$	2,078,315,021				
Total Customer Ops	$	15,262,422,241	$	15,262,422,241	$	12,129,179,347
Corporate Ops ('93 Actual)	$	10,148,262,000				
less: overhead assigned to TSLRIC	$	2,165,848,227				
less: overhead assigned to Customer Ops	$	791,046,433				
Net Corporate Ops	$	7,191,367,340				
Plus: CapCost of GSF	$	1,133,632,071				
Total Corporate Ops	$	6,057,735,269	$	6,057,735,269	$	6,071,444,078
Uncollectibles	$	1,068,028	$	1,068,028	$	6,070,376,050
Operational Inefficiencies			$	6,070,376,050	$	-

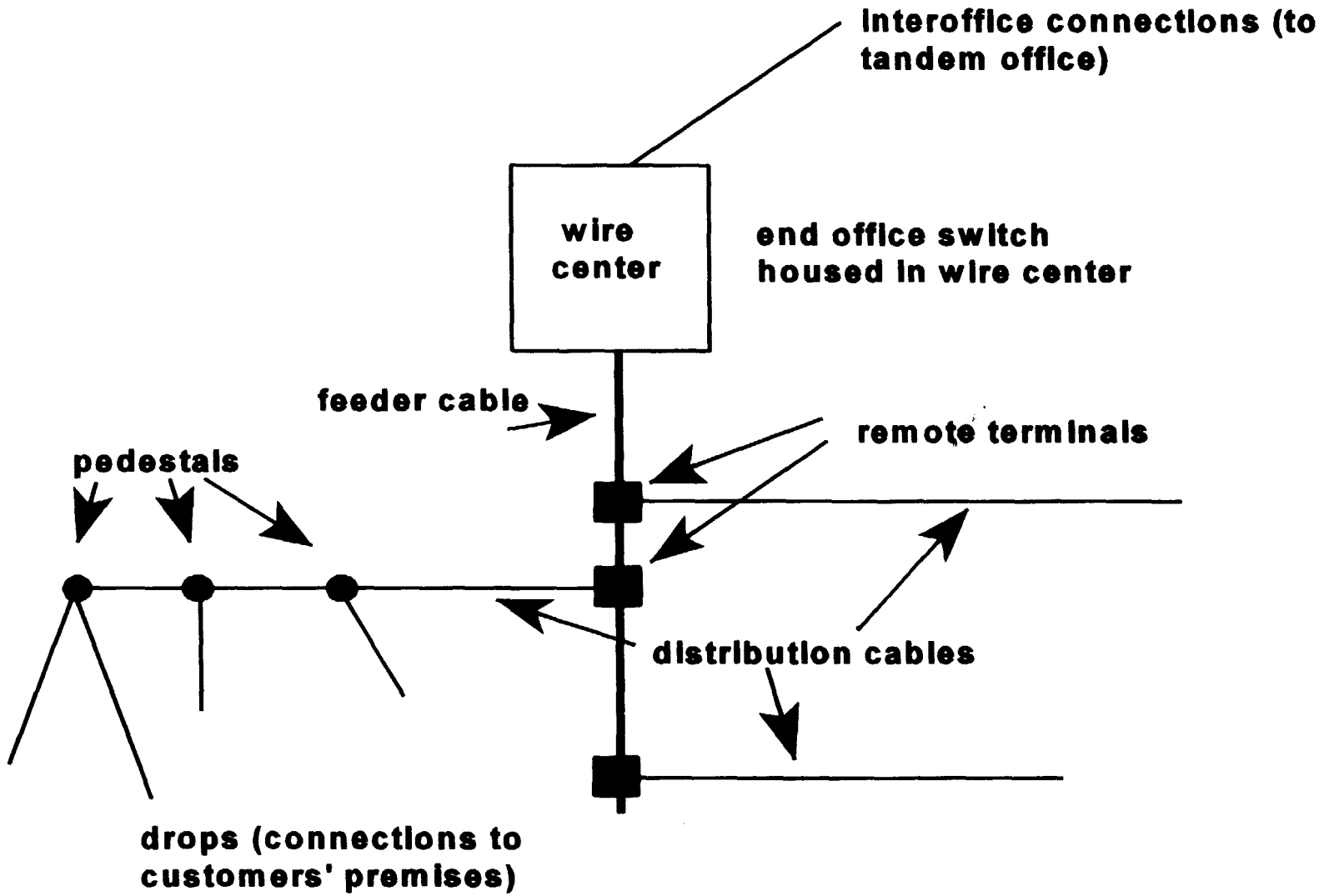
Network Element Cost Modeling Process



Local Exchange Network Structure



Distribution Network Structure



Details of Distribution Network Structure